

AMENDMENTS

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method, comprising:
for transmitting and receiving customer data in a fault-tolerant ring network comprised of a plurality of nodes with adjacent pairs of nodes linked by at least one of a service link and a protection link, with at least a first and second adjacent nodes only linked by a protection link, ~~comprising the steps of~~:
transmitting and receiving a first type of data using ~~the~~ only service links when the network is in a no-fault condition; and
transmitting and receiving the first type of data using ~~one or more of the~~ at least one protection links when the network is in a fault condition.
2. (Original) The method of claim 1, further comprising:
transmitting and receiving a second type of data using the protection links when the network is in a no-fault condition; and
suspending transmission of the second type of data over one or more of the protection links when the network is in a fault condition.
3. (Original) The method of claim 2, wherein the second type of data includes pre-emptable data.
4. (Currently Amended) A method for communication among nodes of a fault-tolerant ring network, comprising:
dividing the nodes into groups comprising a first group linked to a second group only by a

predetermined protection link;

dividing traffic into a first type of data and a second type of data;
communicating the first type of data between two or more nodes; and
communicating the second type of data between nodes of different groups.

5. (Original) The method of claim 4, further comprising:
communicating the first type of data between nodes of different groups when a fault is detected in the network; and
suspending communications of the second type of data between nodes that are adjacent to the fault.

6. (Currently Amended) A method comprising:
for operating an end node of a group of a plurality of groups of contiguous nodes in a fault-tolerant ring network, the end node being one of two nodes in the group that is adjacent to only one other node of the group, ~~the method comprising~~:
transmitting and receiving a first type of data to and from the other node when a fault is not detected; and
transmitting and receiving the first type of data to and from an end node of an adjacent group when the fault is detected.

7. (Original) The method of claim 6, further comprising:
transmitting and receiving a second type of data to and from the end node of the adjacent group when the fault is not detected; and
suspending transmission and reception of the second type of data to and from the end node of the adjacent group when the fault is detected.

8. (Original) The method of claim 7, wherein the second type of data includes pre-emptable data.

9. (Currently Amended) A fault-tolerant ring network of nodes, comprising:
protection links between all pairs of adjacent nodes of the ring network;
two or more groups of contiguous nodes of the ring network; and
service links between two or more adjacent nodes of the ring network, but not between adjacent nodes of different groups.

10. (Original) The network of claim 9, wherein a first type of data is transmitted and received using only the service links when the network is in a no-fault condition, and using one or more of the protection links when the network is in a fault condition.

11. (Original) The network of claim 10, wherein a second type of data is transmitted and received using the protection links when the network is in a no-fault condition, and transmission of the second type of data is suspended over one or more of the protection links when the network is in a fault condition.

12. (Original) The network of claim 11, wherein the second type of data includes pre-emptable data.

13. (Currently Amended) A fault-tolerant ring network, comprising:
a plurality of nodes divided into groups comprising ; and
a first group and a second group linked only by a predetermined protection link a first type of data and a second type of data, wherein the a first type of data is communicated between at least two of the nodes, and the a second type of data is communicated between nodes of

~~different groups~~ the first group and the second group.

14. (Original) The network of claim 13, wherein the first type of data is communicated between nodes of different groups when a fault is detected in the network and communications of the second type of data between nodes that are adjacent to the fault is suspended.

15. (New) The method of claim 6, wherein the fault is not caused by a failed switch.

16. (New) The network of claim 9, wherein a first type of data is transmitted and received using only the service links when the network is in a no-fault condition, and using one or more of the protection links when the network is in a fault condition, wherein the fault condition is not caused by a failed switch.

17. (New) The fault-tolerant ring network of claim 9, wherein said fault-tolerant ring network is a Sonet network.

18. (New) The fault-tolerant ring network of claim 9, wherein at least one node is a Sonet terminal.

19. (New) The fault-tolerant ring network of claim 9, wherein at least one of the nodes comprises a digital cross-connect system.

20. (New) The fault-tolerant ring network of claim 9, wherein at least one service link comprises fiber-optic cable.